WHAT IS CLAIMED IS:

1. A method of manufacturing a long-life heat-resisting low alloy steel welded component including the steps of subjecting a base metal containing, at % by weight, C: 0.15% or less, Si: 0.5% or less, Mn: 0.3 to 0.8%, Cr: 1.9 to 2.6%, Mo: 0.87 to 1.20%, and a balance of iron and unavoidable impurities, to a hot working, to a heat treatment, and then to a welding, wherein the base metal is normalized once or more times before the welding in addition to the hot working.

2. The manufacturing method according to claim 1, wherein the base metal has been subjected to annealing or normalizing and tempering.

3. The manufacturing method according to claim 1, wherein the base metal is subjected to the hot working in a normalizing temperature range, after the normalizing.

4. The manufacturing method according to claim 1, wherein the base metal contains, at % by weight, Mn: 0.3 to 0.6% and Mo: 0.87 to 1.13%.

5. The manufacturing method according to claim 4, wherein the normalizing of the base metal is carried out at least twice.

6. A method of manufacturing a long-life heat-resisting low alloy steel welded component including the steps of subjecting a base metal containing, at % by weight, C: 0.04% to 0.10%, Si: 0.5% or less,

Mn: 0.1 to 0.6%, Cr: 1.9 to 2.6%, Mo: 0.05 to 0.3%, V: 0.20 to 0.30%, Nb: 0.02 to 0.08%, W: 1.45 to 1.75%, B: 0.0005 to 0.006% and a balance of iron and unavoidable impurities, to a hot working, to a heat treatment, and then to a welding, wherein the base metal is normalized once or more times before the welding in addition to the hot working.

7. The manufacturing method according to claim 6, wherein the base metal has been subjected to annealing or normalizing and tempering.

8. The manufacturing method according to claim 6, wherein the base metal is subjected to the hot working in a normalizing temperature range, after the normalizing.

9. A method of manufacturing a long-life heat-resisting low alloy steel welded component including the steps of subjecting a base metal containing, at % by weight, C: 0.2% or less, Si: 1.0% or less, Mn: 0.3 to 0.9%, Cr: 0.3 to 1.5%, Mo: 0.4 to 0.7%, and a balance of iron and unavoidable impurities, to a hot working, to a heat treatment, and then to a welding, wherein the base metal is normalized once or more times before the welding in addition to the hot working.

10. The manufacturing method according to claim 9, wherein the base metal has been subjected to annealing or normalizing and tempering.

11. The manufacturing method according to claim 9,

wherein the base metal is subjected to the hot working in a normalizing temperature range, after the normalizing.

12. The manufacturing method according to claim 9, wherein the base metal contains, at % by weight, Mn: 0.3 to 0.6%, Cr: 0.5 to 1.5% and Mo: 0.40 to 0.65%.

13. The manufacturing method according to claim 9, wherein the base metal further contains, at % by weight, V: 0.22 to 0.50%.

14. A long-life heat-resisting low alloy steel welded component manufactured by the steps of subjecting a base metal containing, at % by weight, C: 0.15% or less, Si: 0.5% or less, Mn: 0.3 to 0.8%, Cr: 1.9 to 2.6%, Mo: 0.87 to 1.20%, and a balance of iron and unavoidable impurities, to a hot working, to a heat treatment, and then to a welding, wherein the base metal is normalized once or more times before the welding in addition to the hot working.

15. The heat-resisting low alloy steel welded component according to claim 14, wherein the base metal has been subjected to annealing or normalizing and tempering.

16. The heat-resisting low alloy steel welded component according to claim 14, wherein the base metal is subjected to the hot working in a normalizing temperature range, after the normalizing.

17. The heat-resisting low alloy steel welded

component according to claim 14, wherein the welded component can be applied to at least one of longitudinal joint and circumferential joint of pipes, vessel, valve casing and branch pipes that are used under a high-temperature and high-pressure steam atmosphere at a temperature of 450℃ or higher.

18. The heat-resisting low alloy steel welded component according to claim 14, wherein the base metal contains, at % by weight, Mn: 0.3 to 0.6% and Mo: 0.87 to 1.13%.

19. The heat-resisting low alloy steel welded component according to claim 18, wherein the normalizing of the base metal is carried out at least twice.

20. A long-life heat-resisting low alloy steel welded component manufactured by the steps of subjecting a base metal containing, at % by weight, C: 0.04% to 0.10%, Si: 0.5% or less, Mn: 0.1 to 0.6%, Cr: 1.9 to 2.6%, Mo: 0.05 to 0.3%, V: 0.20 to 0.30%, Nb: 0.02 to 0.08%, W: 1.45 to 1.75%, B: 0.0005 to 0.006% and a balance of iron and unavoidable impurities, to a hot working, to a heat treatment, and then to a welding, wherein the base metal is normalized once or more times before the welding in addition to the hot working.

21. The heat-resisting low alloy steel welded component according to claim 20, wherein the base metal has been subjected to annealing or normalizing and tempering.

22. The heat-resisting low alloy steel welded component according to claim 20, wherein the base metal is subjected to the hot working in a normalizing temperature range, after the normalizing.

23. The heat-resisting low alloy steel welded component according to claim 20, wherein the welded component can be applied to at least one of longitudinal joint and circumferential joint of pipes, vessel, valve casing and branch pipes that are used under a high-temperature and high-pressure steam atmosphere at a temperature of 450℃ or higher.

24. A long-life heat-resisting low alloy steel welded component manufactured by the steps of subjecting a base metal containing, at % by weight, C: 0.2% or less, Si: 1.0% or less, Mn: 0.3 to 0.9%, Cr: 0.3 to 1.5%, Mo: 0.4 to 0.7%, and a balance of iron and unavoidable impurities, to a hot working, to a heat treatment, and then to a welding, wherein the base metal is normalized once or more times before the welding in addition to the hot working.

25. The heat-resisting low alloy steel welded component according to claim 24, wherein the base metal has been subjected to annealing or normalizing and tempering.

26. The heat-resisting low alloy steel welded component according to claim 24, wherein the base metal is subjected to the hot working in a normalizing

temperature range, after the normalizing.

27. The heat-resisting low alloy steel welded component according to claim 24, wherein the welded component can be applied to at least one of longitudinal joint and circumferential joint of pipes, vessel, valve casing and branch pipes that are used under a high-temperature and high-pressure steam atmosphere at a temperature of 450℃ or higher.

28. The heat-resisting low alloy steel welded component according to claim 24, wherein the base metal contains, at % by weight, Mn: 0.3 to 0.6%, Cr: 0.5 to 1.5% and Mo: 0.40 to 0.65%.

29. The heat-resisting low alloy steel welded component according to claim 24, wherein the base metal further contains, at % by weight, V: 0.22 to 0.50%.